second filamentous fungal cells are labeled with one or more different second fluorescent reporters; and

(b) examining the array by fluorescence under fluorescence excitation conditions wherein the relative expression of the genes in the filamentous fungal cells is determined by the observed fluorescence emission color of each spot in the array in which (i) the fluorescence-labeled nucleic acids obtained from the first filamentous fungal cell that are hybridized to the ESTs in the array produce a distinct first fluorescence emission color and the fluorescence-labeled nucleic acids obtained from the one or more second filamentous fungal cells that are hybridized to the ESTs in the array produce a distinct second fluorescence emission color, and (ii) the fluorescence-labeled nucleic acids obtained from both the first and the one or more second filamentous fungal cells that are hybridized to the ESTs in the array produce a distinct combined fluorescence emission color.

104. (New) The method of claim 103, wherein one or more of the filamentous fungal cells are selected from the group consisting of an *Acremonium*, *Aspergillus*, *Fusarium*, *Humicola*, *Mucor*, *Myceliophthora*, *Neurospora*, *Penicillium*, *Thielavia*, *Tolypocladium*, and *Trichoderma* cell.

105. (New) The method of claim 103, wherein the two or more filamentous fungal cells are the same cell.

106. (New) The method of claim 103, wherein the two or more filamentous fungal cells are *Fusarium venenatum* cells.

107. (New) The method of claim 103, wherein the two or more filamentous fungal cells are *Aspergillus niger* cells.

108. (New) The method of claim 103, wherein the two or more filamentous fungal cells are *Aspergillus oryzae* cells.

109. (New) The method of claim 103, wherein the two or more filamentous fungal cells are different cells.

110. (New) The method of claim 103, wherein the hybridization conditions are selected from the group consisting of very low, low, low-medium, medium, medium-high, high, and very high stringency conditions.